BUTTERFLIES (HESPERIOIDEA, PAPILIONOIDEA) ON ISLANDS IN THE AEGEAN ARCHIPELAGO: A CORRECTION, ADDITIONS, AN AID TO IDENTIFICATION AND A CAUTIONARY TALE

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SINCE THE PUBLICATION of our papers on the butterflies in the Aegean archipelago (Dennis et al. 2000, 2001), some additional species have arisen for a number of the islands (Thásos, Híos, Límnos, Santoríni and Síros) and one species has been corrected (withdrawn) for Crète. Also, a useful reference for literature from Crète has been brought to our notice.

The correction is for the specimen reported to be of *Polyommatus thersites* (Cantener) [1835] on Crète in the collection of Mr C. I. Rutherford. Although this record was included in our paper, two of the co-authors, with long experience of working on butterflies in the Aegean (JGC and AO), doubted the validity of the identification. Mr Rutherford has kindly allowed one of us (JGC) to examine the genitalia of the specimen that is now demonstrated to be that of *Polyommatus icarus* (Rottemburg, 1775). Drawings of the genitalia of the two species are presented that should facilitate identification of *P. thersites* in future.

Mr Rutherford initially took the specimen for *Polyommatus icarus* in 1983 as it was observed late in the year and at higher altitude than he was familiar with. Later on, he realised that the butterfly matched details described by Pamperis (1997) for *P. thersites*. This book reported the butterfly for the island and therefore it seemed very likely to Mr Rutherford that his specimen was in actual fact *P. thersites*. However, it is clear that the adult wing attributes generally advised as distinguishing the two species, particularly the lack of forewing underside basal black spots (Pamperis, 1997), are inadequate identification markers for *P. thersites*. In Crète, *P. icarus*, very often lacks the forewing underside basal spot (Coutsis, pers. obs.). This erroneous record is valuable for demonstrating the importance of recorders taking voucher specimens to be examined by those specialists familiar with particular taxa.

Although Mr Rutherford frequently dissects insects for identification purposes, in this case no appropriate guide existed. Although illustrations of the genitalia of both species appear in Higgins (1976: 159 and 166; Tremewan, pers comm.), these are not particularly clear in distinguishing the two species. This situation is now rectified by the drawings herein made by JCG. The Cretan specimen is a *P. icarus* primarily by virtue of the fact that its aedeagus has a slender distal end in dorsal view, as is the case with all other members of the subgenus *Polyommatus* of the genus *Polyommatus*. In *P. thersites* this part of the aedeagus is bulbous in dorsal view, as is the case with

all members of the subgenera *Agrodiaetus*, *Lysandra* and *Neolysandra* of the genus *Polyommatus*. Omitting all other character differences between the two, the above mentioned difference is in itself sufficient for differentiating *P. icarus* from *P. thersites*.

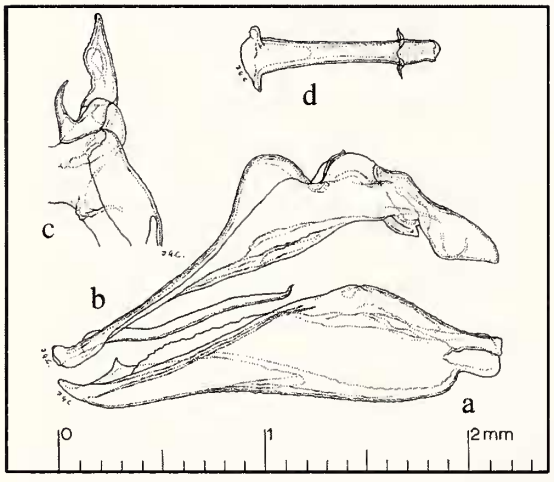

Figure 1

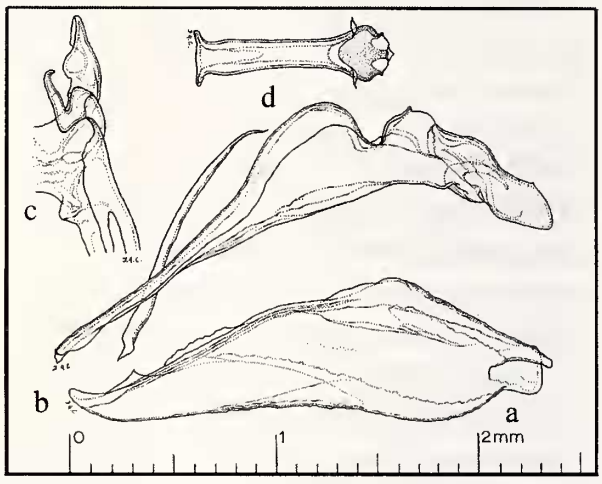

Figure 2

Figure 1. Genitalia of male: **1**. *Polyommatus icarus* (Rottemburg, 1775), Greece, Crète, Potamí 3km W of Ierápetra on the Lasíthi plateau, 1200m. (October 1983).

Figure 2. *Polyommatus thersites* (Cantener, [1835]), Iran, Azarbayjan-e, Dugijan, 30km NE of Marand, 2000m.

In both figures: **a**. Lateral view of outer face of left valva; **b**.Lateral view of left side of genitalial apparatus with valvae and aedeagus removed; **c**. Ventral view of right labis and falx together with right half of tegumen; **d**. Dorsal view of aedeagus.

This kind of error, made in the past, also explains why it has been necessary to omit some references, and some records from references, from our work on the Aegean islands (e.g., Kattioulas [correctly Kattoulas] & Koutsaftikis, 1977; Schmidt, 1989; Pamperis, 1997). However, one useful reference to older publications on Lepidoptera, not mentioned in our paper, is that for the island of Crète (Leestmans, 1988). This does not add any new species for the island but it nicely illustrates the locations from which earlier records have been made. In the same issue is an interesting paper on general aspects of Cretan biogeography (Parent, 1988). We have not included recent observational notes from Crète which do not add to the list of species.

The additions for the island of Híos are the result of detailed, long-term, biodiversity research on the island by Liverpool Museum supported by the Greek Ministry of Agriculture, Department of National Parks and Game Management. This licensed work is being undertaken by Mr Mike Taylor and his colleagues from the Entomology Section of the Liverpool Museum, National Museums and Galleries on Merseyside and from the Manchester Museum. Two new butterfly species have been added to the Híos list, *Gegenes*

annually since 1996; voucher specimen taken at Káto Faná in south Híos in May 1996; Mr Mike Taylor). Possible additions for Thásos are discussed fully by Dr Adrian Fowles at his website [http://www.thasos.moonfruit.com]. He mentions additional species to the list of Holloway (1996), one of which (i.e. *Anthocharis gruneri* Herrich-Schäffer, [1851]) has been confirmed (Abadjiev, 2000). Further possible additions, remaining unconfirmed, appear in Chilton (1999). One of these is *Charaxes jasius* (Linnaeus, 1767), which we predict may be found on the island (Dennis et al. 2001). Additions for Límnos (*Gegenes nostrodamus* (Fabricius, 1793), Santoríni (*Gegenes pumilio* (Hoffmansegg, 1804) and Síros (*Lampides boeticus* (Linnaeus, 1767) and *Leptotes pirithous* (Linnaeus, 1767)) are reported in Coutsis (2001), together with the official report of three other recent records listed in our paper (Dennis et al. 2001). Three of these four new records are predicted by our analysis; *G. nostrodamus* had too low an incidence on the islands from which to make predictions.

The message in the records is that, for all the need to take care to avoid unnecessary collecting, it is absolutely essential that voucher specimens are taken of individuals believed to be, and reported to be, of species new to island lists. Without this material, the observations simply cannot be accepted as being valid records for biogeographical research or as adequate data for conservation purposes, regardless of how striking the organisms are known to be. Extraordinary as it may seem, in the UK, observations have been reported for prominent nymphalids such as *Vanessa atalanta* (Linnaeus, 1758) and found later from specimen, description or photograph to be something else! Many of the identification characters used to distinguish European butterflies, even though beautifully illustrated (e.g., Pamperis, 1997), have been found to be anything but suitable alternatives, – in many cases quite simply wrong, – to having the specimens for further examination. There is obviously an urgent need for a clear identification guide to European butterflies.

Acknowledgements

Grateful thanks to Ian Rutherford for so kindly sending his specimen to John Coutsis for examination; also, to Mike Taylor and Mike Hull for permitting their records from Híos to be reported in this note, and to Adrian Fowles, CCW, Bangor, Gwynedd, for permission to present details of his web site for Thásos. Our thanks to Mr. Ronny Leestmans for drawing our attention to his 1988 paper, as well as that by Parent (1988).

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A second sighting of *Sitaris muralis* (Forst.) (Col.: Meloidae) at Welling in north-west Kent

Recently (*antea*: 25-26) I published the first record of this interesting beetle for a very long time, based on a specimen sighted in the above suburban locality. A second occurrence in the same place just over a year later proves the species to be breeding in the area. I quote (with slight changes) from Mr K. C. Lewis's letter:

> "I have seen the beetle . . . again, 21 July 2001, through my binoculars, on the wall of the next-door block of flats, from my window about 15 feet away. There were holes and cracks in the concrete, and a single bee was settled near the largest hole."

Circumstances precluded a photograph, which would have required a telephoto lens. The holes — exit-holes of a *Sitaris* colony? — have now been filled in as part of renovation work; and one can but hope that further colonies exist nearby, in less vulnerably placed.

In my note cited above, *Alpus* (p. 26, line 18) should of course be *Apalus*.–

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